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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and
FEDERAL-STATE-PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE and

COLORADO AGRICULTURAL EXPERIMENT STATION STATE ENGINEER of COLORADO and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State, and private organizations.

MAR. 1, 1968

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data or reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

D. A. WILLIAMS, Administrator

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 507, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85205
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	P. O. Box 38, Boise, Idaho 83707
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Building, Salt Lake City, Utah 84111
Washington	360 Federal Office Building, Spokane, Washington 99201
Wyoming	P. O. Box 340, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and
FEDERAL-STATE-PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Mosca Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Lower Cebolla, Abiquiu-Vallecitos, Eastern Taos, Lindrith, Coyote-Canones, Espanola Valley, Pojoaque, Jemez, Santa Fe-Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

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WATER SUPPLY OUTLOOK

as of

March 1, 1968



The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS

as of

March 1, 1968

THE MOUNTAIN SNOW PACK IS NEAR AVERAGE THROUGHOUT COLORADO AND NEW MEXICO.

MOST STREAMS IN COLORADO AND NEW MEXICO ARE PREDICTED TO FLOW NEAR NORMAL

THIS SUMMER. STREAMFLOW FORECASTS IN COLORADO RANGE FROM 80 PERCENT OF

AVERAGE ON THE ARKANSAS TO 120 PERCENT IN THE SOUTHWEST CORNER OF THE STATE.

THE RIO GRANDE IN NEW MEXICO IS FORECAST AT 107 PERCENT OF AVERAGE THIS YEAR.

OTHER STREAMS IN NEW MEXICO WILL FLOW FROM 80 - 128 PERCENT OF NORMAL. THIS

YEAR'S WATER SUPPLIES WILL VARY LOCALLY DEPENDING UPON THE USAGE AND CARRY
OVER RESERVOIR STORAGE.

COLORADO - THE SNOW PACK IN COLORADO IS JUST ABOUT NORMAL IN ALL MOUNTAIN AREAS. THE MONTH END STORMS DROPPED AS MUCH AS SIX INCHES OF WATER IN THE FORM OF SNOW IN SOME AREAS. THIS YEAR'S WATER SUPPLIES WILL DEPEND TO A GREAT EXTENT UPON USAGE AND CARRY-OVER STORAGE. THE SOUTH PLATTE HAS GOOD CARRY-OVER STORAGE AND SHOULD HAVE A GOOD WATER YEAR. THE ARKANSAS DRAINAGE HAS BELOW NORMAL STORAGE AND COULD HAVE SOME SHORTAGE. THE REST OF THE STATE WILL HAVE ABOUT NORMAL SUPPLIES. VALLEY SOILS ARE GENERALLY IN GOOD CONDITION.

NEW MEXICO- WATER SUPPLIES SHOULD BE ABOUT NORMAL OVER THE STATE

THIS SUMMER. RUNOFF FORECASTS RANGE FROM A LOW OF 80

PERCENT TO A HIGH OF 128 PERCENT. RESERVOIR STORAGE IS BELOW

NORMAL IN MOST AREAS OF THE STATE AND NOT EXPECTED TO GAIN DURING THE SUMMER.

SOME SHORTAGES, ESPECIALLY ON SMALL UNREGULATED STREAMS, COULD OCCUR. LATE

SEASON SUPPLIES WILL BE ESPECIALLY LOW. VALLEY SOILS ARE REPORTED AS FAIR TO

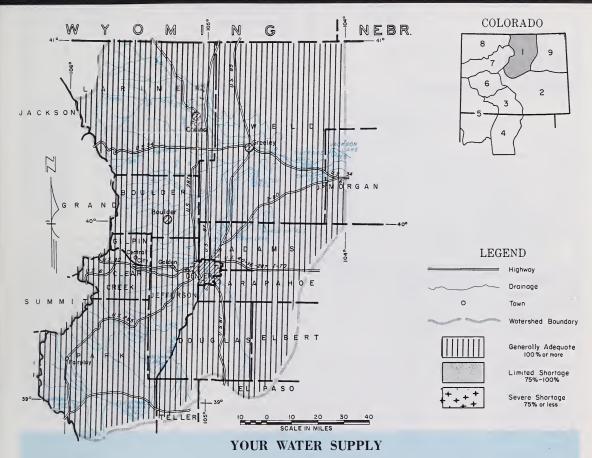
GOOD. IF CROPS DO NOT HAVE TO BE WATERED UP, NO SERIOUS SHORTAGES SHOULD OCCUR.

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

March 1, 1968

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



STREAMFLOW SHOULD BE ADEQUATE OVER THE ENTIRE UPPER SOUTH PLATTE THIS SUMMER. SNOW OVER THE BASIN IS NEAR NORMAL. FORECASTS ARE FOR NEAR NORMAL FLOWS, IF THE REMAINDER OF THE SNOW YEAR IS AVERAGE OR ABOVE SNOWFALL. CARRY-OVER STORAGE IN THE AREA'S MANY RESERVOIRS IS 140 PERCENT OF THE 1948-62 AVERAGE AND WILL BE AN EXCELLENT SUPPLEMENT. MOUNTAIN SOIL MOISTURE IS IN GOOD CONDITION. VALLEY SOILS ARE REPORTED AS FAIR TO GOOD.

This report prepared by

JACK N. MSHICHEK and OON W. MCANOREW

SOIL CONSERVATION SERVICE. COLORAGO STATE UNIVERSITY

FORT COLLINS, COLORAGO

F. A. MARK.—STATE CONSERVATIONIST

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DENVER, COLORADO
ORNVER, COLORADO
ORNVER, COLORADO

STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr-Sept

STREAM and STATION	FORE CAST	THIS YEAR %AVE.	15 YR. AVE. 1948-62
Big Thompson at Drake (2) Boulder at Orodell Cache La Poudre at		91 106	110 54
Canon Mouth (1)	200 144 85	,	183 134 80
Observed flow minus trans-basin diversi Observed flow plus by-pass to power ple Observed flow minus diversions through	ints.	Pass.	

WATER SUPPLY OUTLOOK expressed "Poor, Fair, Good"

	FLOW	PERIOD
STREAM	April May	June Thru Sept.
Bear Creek Coal Creek Deer Creek North Fork of So. Platte North Fork of Cache La Poudre Ralston Creek Rock Creek	Fair Good Good Fair Good Good	Fair Fair Fair Fair Fair Fair

SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES	THIS YEARS SNOW AS PERCENT OF		
	AVERAGED	Last Year	Average	
Boulder	2	176	126	
Big Thompson	4	110	91	
Cache La Poudre	7	118	111	
Clear Creek	4	109	99	
Saint Vrain	2	150	109	
South Platte	3	106	97	

AVAILABLE SOIL MOISTURE

AVAILABLE SUIL MUISTUR	L			
RIVER BASIN	NUMBER of	THIS YEARS MOISTURE AS PERCENT OF		
	STATIONS	Last Year	Average	
South Platte Clear Creek Boulder Saint Vrain Big Thompson Cache La Poudre	2 2 1 2 3 2	115 106 140 140 138 89	93 91 144 124 102 89	

RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Antero Barr Lake Black Hollow Boyd Lake Cache La Poudre Carter Lake Chambers Lake Cheeseman Cobb Lake Eleven Mile Fossil Creek Gross	33.0 32.2 8.0 44.0 9.5 108.9 8.8 79.0 34.3 97.8 11.6 43.1	15.9 26.7 3.5 41.7 8.4 92.5 3.2 39.5 20.0 93.1 6.5 31.1	2.8 29.6 0.0	13.4 20.5 3.1 18.6 6.6 63.0 2.2 49.8 9.3 74.2 6.0

RESERVOIR USABLE CAPACIT	Y YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Halligan Horsetooth Lake Loveland Lone Tree Mariano Marshall Marston Milton Standley Terry Lake Union Windsor 143.5 143	97.9 12.2 8.0 5.1 5.5 13.8 16.4 29.3 6.2 11.5	3.1 83.8 3.6 4.1 4.5 1.2 15.5 6.0 8.2 4.4 6.3 4.4	2.9 69.5 6.3 5.8 2.7 2.5 13.8 10.7 10.2 4.6 7.6 8.6

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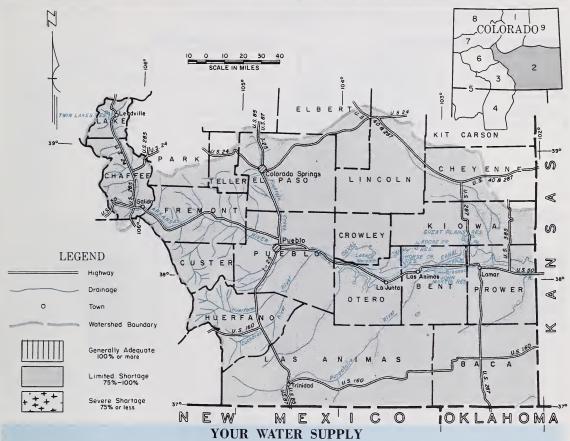
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE ARKANSAS RIVER WATERSHED IN COLORADO

as of

March 1, 1968

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



THERE WILL BE SOME SHORTAGE OF WATER THIS SUMMER. THE SNOW PACK IS NEARLY NORMAL ON THE ARKANSAS AND 105 PERCENT ON TRIBUTARY STREAMS, HOWEVER, FORECASTS ARE DOWN. THE MAIN STEM SHOULD FLOW ABOUT 80 PERCENT OF AVERAGE. RESERVOIR STORAGE IS 74 PERCENT OF NORMAL AND MUCH BELOW LAST YEAR. SOIL MOISTURE IN THE MOUNTAINS IS BETTER THAN AVERAGE. VALLEY SOIL MOISTURE IS REPORTED AS GOOD IN THE UPPER BASIN AND ONLY FAIR IN THE LOWER REACHES.

This report prepared by

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DENVER, COLORADO
LA JUNTA, COLORADO

STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr-Sept

STREAM and STATION	FORE	THIS YEAR %AVE.	15 YR. AVE. 1948-62
Arkansas at Pueblo (4) Arkansas at Salida (4) Cucharas nr LaVeta Purgatoire at Trinidad	254 275 13 40		' '
(4) Observed flow plus change in Clear Creek and Sugar Loaf Reservoirs minus diversic Busk - Ivanhoe and Twin Lake Tunnels a Front Pass, Wurtz and Columbine ditches	ons thro and Ewi	ough	,

SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES	THIS YEARS SNOW AS PERCENT OF		
	AVERAGED	Last Year	Average	
Arkansas	6	107	101	
Cucharas and Purgatorie	1	189	105	

WATER SUPPLY OUTLOOK expressed "Poor, Fair, Good"

	FLOW	PERIOD
STREAM	April May	June Thru Sept.
Apishapa Fountain Creek Grape Creek Harelscrable Creek Huerfano Monument Creek	Good Good Good Good Good Good	Fair Fair Good Good Good Fair

AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER	THIS YEARS MOISTURE AS PERCENT OF		
	STATIONS	Last Year	Average	
Arkansas Cucharas and	3	136	146	
Cucharas and Purgatorie	1	133	145	

RESERVOIR STORAGE (1.000 Ac. Ft.) Measured First of Month

RESERVOIR			AST 15 YEAR AVE. 1948-62	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Adobe Creek Clear Creek Cucharas Great Plains Horse Creek	40.0 150.0 5	7.4 28. 8.4 7. 0.0 1. 4.0 48. 0.4 8.	5.4 5 5.3 4 45.3	John Martin Meredith Model Sugar Loaf Twin Lakes	366.6 41.9 15.0 17.4 57.9	39.4 2.3 3.3 1.6 30.4	6.9	77.7 10.2 2.6 7.0 19.7

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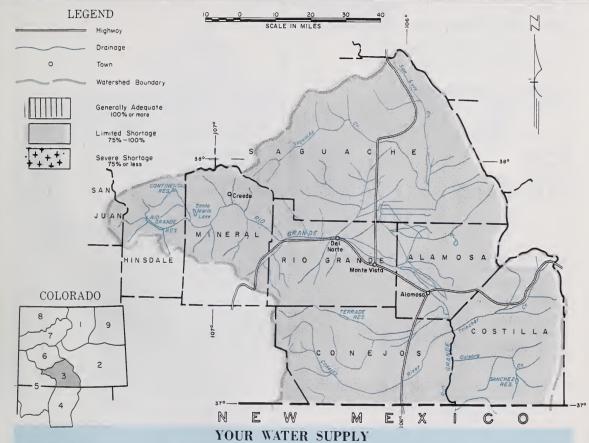
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE UPPER RIO GRANDE WATERSHED IN COLORADO

as of

March 1, 1968

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



THE RIO GRANDE VALLEY IN COLORADO SHOULD HAVE A NEAR NORMAL WATER SUPPLY THIS SUMMER. THE SNOW PACK ON THE MAIN STEM AND TRIBUTARIES IS NEAR NORMAL, BUT CONSIDERABLY LESS THAN LAST YEAR. FORECASTS RANGE FROM 95 PERCENT OF NORMAL ON THE CULEBRA TO 106 PERCENT ON THE RIO GRANDE. IF SNOW FALL REMAINS NORMAL OR ABOVE FOR THE REMAINDER OF THE YEAR NO SERIOUS SHORTAGE IS EXPECTED. CARRY-OVER STORAGE IN THE BASIN'S MAJOR RESERVOIRS IS ABOUT 87 PERCENT OF NORMAL AND WILL BE A GOOD SUPPLEMENTAL SUPPLY. MOUNTAIN SOILS ARE WETTER THAN USUAL AND WILL HELP HOLD UP FLOWS. VALLEY SOILS ARE REPORTED TO BE IN GOOD CONDITION.

This report prepared by

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J. S. DEPARTMENT OF A GRICULTURE - SOIL CONSERVATION SERVICE

DENVER. COLORADO

DURANGO, COLORADO

STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr-Sept

STREAM and STATION	FORE CAST	THIS YEAR %AVE.	15 YR. AVE. 1948-62
Alamosa abv Terrace Conejos nr Mogote Culebra at San Luis (6) Rio Grande at 30 Mile Bridge (5)	69 190 20	97 95	68 196 21
Rio Grande at Del Norte (5) South Fork at South Fork			492 122

(5) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoir.
(6) Observed flow plus changes in storage in Sanchez

Reservoir.

STOFAN		PERIOD
STREAM	April May	June Thru Sept.
Suguache Creek Sargrede Cristo Creek Trinchera Creek	Good Good Good	Good Good Good
AVALIABLE COLL MOICTURE		

WATER SUPPLY OUTLOOK expressed "Poor, Fair, Good"

SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES	THIS YEARS SNOW AS PERCENT OF		
	AVERAGED	Last Year	Average	
Alamosa Conejos Culebra Rio Grande	2 2 2 8	122 79 136 125	95 86 98 108	

AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of	THIS YEARS MOISTURE AS PERCENT OF		
	STATIONS		Average	
Alamosa Conejos Culebra Rio Grande	2 1 1 3	127 107 133 142	114 117 145 117	

RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Continental	26.7	4.0	4.7	5.4
Platoro	60.0	3.0	3.0	
Rio Grande	45.8	7.4	9.1	

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Sanchez Santa Maria Terrace	103.2 45.0 17.7	12.5 2.6 6.9	9.1 3.1 5.4	10.2 6.8 3.0

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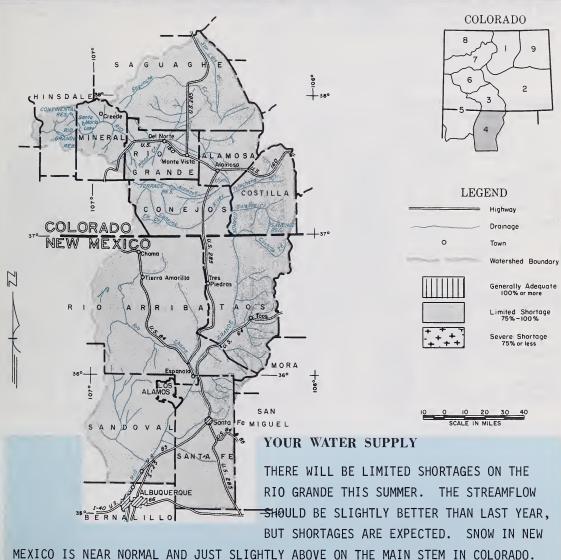
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE RIO GRANDE WATERSHED IN NEW MEXICO

as of

March 1, 1968

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



MEXICO IS NEAR NORMAL AND JUST SLIGHTLY ABOVE ON THE MAIN STEM IN COLORADO. RESERVOIR STORAGE IS BELOW NORMAL. VALLEY AND MOUNTAIN SOILS ARE IN FAIRLY GOOD CONDITION. THE PECOS HAS HIGH SNOW AND SHOULD HAVE A GOOD FLOW.

This report prepared by

JACK N. WASHICHEK and DON W. MCANDREW

SOIL CONSERVATION SERVICE: COLDRADO STATE UNIVERSITY

FORT COLLINS, COLDRADO

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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
ALBUQUERQUE, NEW MEXICO

SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS(1,000 Ac. Ft.)

STREAM and STATION	FORECAST AS INDICATED	YEAR	AVE.
Rio Chama nr La Puenta Rio Grande at Otowi (7) Rio Gra. at San Mar. (7) Rio Hondo nr Valdez Red River at Questa	68 AS 190 AS 650 MJ 455 AJ 18 AS 20 AJ	128 89 107 108 100 80	53 214 609 424 18
The Forecast of the Rio Grande at San M	larcial is 44	% of	

The Forecast of the Rio Grande at San Marcial is 45% of the Average used by the Elephant Butte Irrigation District.

A - S is April through September.

A - I is April through July.

M - I is March through July.

(7) Observed flow plus changes in storage in El Vado and Abiquiu Res.

- (8) Observed flow plus changes in storage in Costilla Reservoir.

SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES	THIS YEARS SNOW AS PERCENT OF		
	AVERAGED	Last Year	Average	
Pecos Rio Chama Rio Grande, N.M. Rio Hondo Red River	1 3 9 1 2	200 + 178 200 + 162 200 +	176 93 109 105 109	

WATER SUPPLY OUTLOOK expressed "Poor Fair Good"

WATER SOLLEL COLEGON OXPIOSSOL	1 001,14	11,4004
	FLOW	PERIOD
STREAM	March May	Jun e July
Embudo Creek Jemez River Mora River Nambe Creek Rio Ojo Caliante Rio Pueblo de Taos Santa Fe Creek	Good Good Good Fair Fair Fair Good	Fair Fair Fair Fair Fair Fair

AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of	THIS YEARS MOISTURE AS PERCENT OF		
MYEN BASIN	STATIONS	Last Year	Average	
Pecos Rio Chama Rio Grande Red River	2 2 5 1	105 96 77 100	87 169 88 72	

RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Alamorgordo	122	72.0	68	76
Caballo	344	48.3	98	117
Conchas	600	184.2	191	239
Elephant Butte	2207	343.2	347	389

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
E1Vado	196.5	17.2	1.2	17.2
McMillen- Avalon	37.0	11.4	26.4	17.8
Red Bluff Texas	307.0	102.5	183.0	71.8

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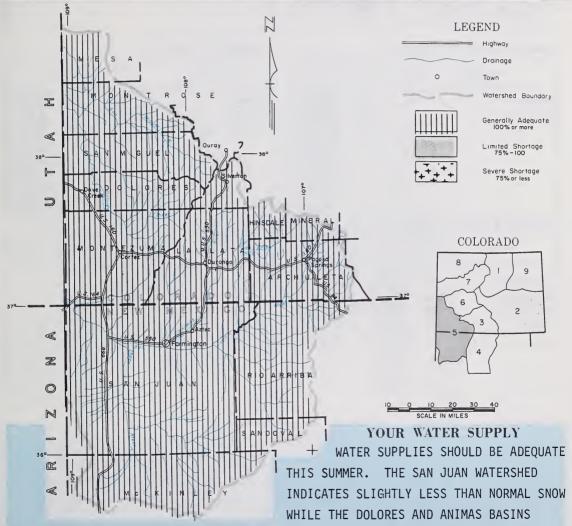
WATER SUPPLY OUTLOOK

FOR THE SOIL CONSERVATION DISTRICTS IN THE

SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATER-SHEDS IN COLORADO AND NEW MEXICO

March 1, 1968

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



ARE ABOVE NORMAL. FORECASTS RANGE FROM A LOW OF 89 PERCENT FOR THE LOS PINOS TO A HIGH OF 126 PERCENT ON THE DOLORES. MOUNTAIN SOIL MOISTURE STATIONS INDICATE MORE MOISTURE THAN AVERAGE AND VALLEY SOILS ARE IN GOOD CONDITION. CARRY-OVER STORAGE IN VALLECITO RESERVOIR IS 114 PERCENT OF AVERAGE.

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DONALO B. TOOTELL.—AREA CONSERVATIONIST W.B. RUMSEY...AREA CONSERV

STREAMFLOW FORECASTS (1.000 Ac. Ft.) Apr-Sept

		•	
STREAM and STATION	FORE	THIS YEAR % AVE.	15 YR. AVE. 1948-62
Piedra Creek at Piedra San Juan at Carracs	330 32 195 195 465 720	126 119 89 107 118 104	27 220 182

SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES	THIS YEA	ARS SNOW ENT OF
	AVERAGED	Last Year	Average
Animas Dolores San Juan	5 4 5	117 139 103	107 130 92

WATER SUPPLY OUTLOOK expressed "Poor, Fair, Good"

WHITE COLLET COLECON ONDICOCCO		11,0000
	FLOW	PERIOD
STREAM	April May	June Thru Sept.
Florida Manoca San Miguel	Good Good Good	Good Good Good

AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER	THIS YEARS MOISTURE AS PERCENT OF		
W. E. O. O.	STATIONS	Last Year	Average	
Animas	3	126	109	
Dolores	3	103	135	
San Juan	2	115	105	

RESERVOIR STORAGE (1.000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62	RESERVOIR	USABLE	THIS YEAR	LAST YEAR	15 YE AVI 1948-
Groundhog Navajo Vallecito Lemon	22 1036 126 40	12.1 587.5 35.4 16.5	370.0 52.1	5.7 45.8 					

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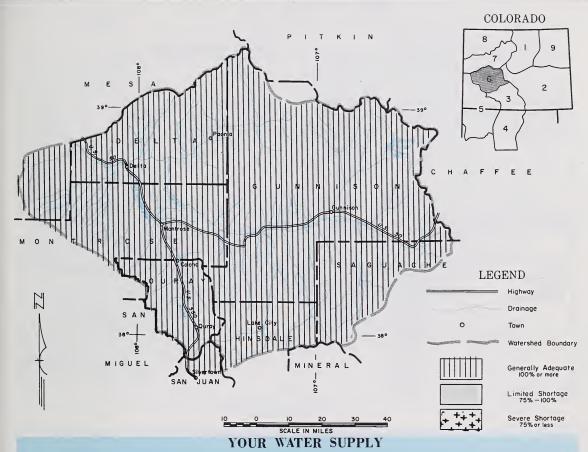
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE GUNNISON RIVER WATERSHED IN COLORADO

as of

March 1, 1968

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



THE SNOW PACK ON THE GUNNISON DRAINAGE REMAINS ABOUT NORMAL. FORECASTS OF THE STREAMS IN THIS BASIN VARY FROM 94 PERCENT OF NORMAL FOR SURFACE CREEK TO 108 PERCENT FOR THE UNCOMPANGRE RIVER. IF THE REMAINDER OF THE SNOW YEAR IS NORMAL THERE SHOULD BE NO MATERIAL WATER SHORTAGES THIS SUMMER. MOUNTAIN SOILS ARE IN GOOD CONDITION. VALLEY SOIL MOISTURE IS REPORTED TO BE EXCELLENT. CARRY-OVER STORAGE IN TAYLOR RESERVOIR IS 79 PERCENT OF THE 15 YEAR AVERAGE.

This report prepared by

JACK N. WASHICHEK and DDN W. MCANDREN

SOIL CONSERVATION SERVICE, COLORADO STATE UNIVERSITY

FORT COLLINS, COLORADO

Issued by

F. A. MARK.--STATE CONSERVATIONIST

U. S. DEPARTMENT OF A GRICULTURE - SOIL CONSERVATION SERVICE

OENVER, COLDRADO GRANO JUNCTION, COLORADO

STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr - Sept

STREAM and STATION	FORE CAST	THIS YEAR %AVE.	15 YR. AVE. 1948-62
Gunnison nr Grand Junction Surface Cr. nr Cedaridge Uncomphagre at Colona	1350 16 150	94	1305 17 139
(9) Observed flow plus changes in storage in Reservoir.	Vallic	ito	

WATER SUPPLY OUTLOOK expressed "Poor, Fair, Good"

	FLOW	PERIOD
STREAM	April May	June Thru Sept.
North Fork of Gunnison Taylor	Good Fair	Good Fair

SUMMARY of SNOW MEASUREMENTS

Somman of Short memoritation							
RIVER	NUMBER of COURSES	THIS YEA					
	AVERAGED	Last Year	Average				
Gunnison Surface Creek Uncompahgre	8 3 3	98 87 145	97 93 123				

AVAILABLE SOIL MOISTURE

ATAILABLE SOIL MOISTOILE						
RIVER BASIN	RIVER BASIN OF		THIS YEARS MOISTURE AS PERCENT OF			
	STATIONS	Last Year	Average			
Gunnison Surface Creek Uncompahgre	1 1 1	168 113 127	142			

RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62	RESERVOIR	USABLE	THIS YEAR	LAST YEAR	'
Taylor Blue Mesa	106.2 941.0	53.0 353.0		56.6					

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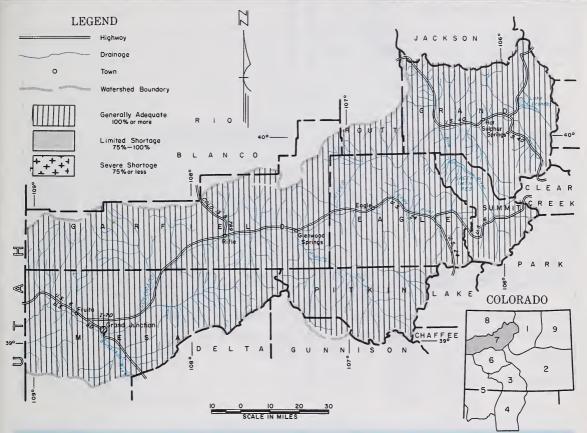
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE COLORADO RIVER WATERSHED IN COLORADO

as of

March 1, 1968

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE COLORADO BASIN SHOULD HAVE NO WATER SHORTAGES THIS SUMMER IF THE REMAINDER OF THE SNOW SEASON IS AT LEAST NORMAL. CURRENT SNOW PACK IS NEAR NORMAL, WITH THE HIGH POINT OF 112 PERCENT ON THE ROARING FORK. CURRENT STREAMFLOW FORE-CASTS RANGE FROM 94 PERCENT OF AVERAGE ON WILLOW CREEK TO 117 PERCENT ON THE WILLIAMS FORK. THE MAIN STEM OF THE COLORADO SHOULD FLOW ABOUT NORMAL. SOIL MOISTURE STATIONS INDICATE SLIGHTLY LESS MOISTURE THAN NORMAL, BUT MUCH BETTER THAN LAST YEAR. VALLEY SOILS ARE REPORTED TO BE IN GOOD CONDITION.

This report prepared by

JACK N. WASHICHEK and DON W. McANOREW

SOIL CONSERVATION SERVICE. COLORADO STATE UNIVERSITY

FORT COLLINS. COLORADO

F. A. MARK
STATE CONSERVATIONIST

STATE CONSERVATIONIST

V. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
ORNER, COLORADO
GLENWOOD SPRINGS, COLORADO
GRAND JUNCTION, COLORADO

STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr-Sept

STREAM and STATION	FORE	THIS YEAR %AVE.	15 YR. AVE. 1948-62
Blue Rv abv. Green Mt (10) Colo Rv nr Granby (11)	260 250	95 107	274 233
Colo. Rv abv Glenwood Springs (12)	16 00	103	1556
Roaring Fork at Glenwood Springs (14) Williams Fk nr Parshall	800	105	762
(15)	90 45		77 48
Colo. nr Cameo (12)	2500	113	2213

(10) Observed flow plus change in storage in Dillon Reservoir.

(11) Observed flow diversions by Adams Tunnel and Grand River Ditch plus change in storage in Granby Reservoir.

(12) Observed flow plus the changes as indicated in (11) plus Moffat

(14) Observed flow plus diversion through Twin Lakes Tunnel. (15) Observed flow plus diversions through Jones Pass Tunnel.

SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES		YEARS SNOW PERCENT OF		
	AVERAGED	Last Year	Average		
Blue River Colorado Roaring Fork Williams Fork Willow Plateau	7 19 6 3 2 3	102 105 84 99 76 88	98 105 99 112 90 94		

	WATER SUPPLY QUILDOK expressed	"Poor,Fa	ir,Good''
	STREAM	FLOW April May	PERIOD June Thru Sept.
	Brush Eagle River Gypsum Creek	Fair Good Good	Fair Fair Fair
Di	ich.		

AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of	THIS YEARS MOISTURE AS PERCENT OF		
	STATIONS.	Last Year	Average	
Blue River Colorado Roaring Fork Willow	1 6 1	115 103 115 111	79 94 102 90	

RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Dillon Granby Green Mountain		226.8 118.0 75.2	214 90 56	201 74

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Williams Fork	96.8	25.0	3.1	
Vega	32.1	2.4	6.8	

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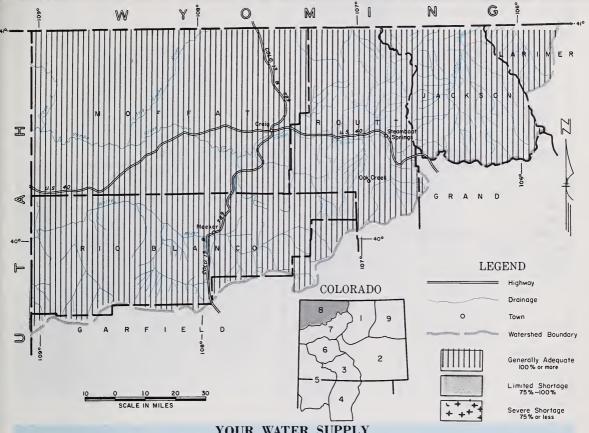
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

March 1. 1968

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW



YOUR WATER SUPPLY

CURRENT SNOW PACK RANGES THIS AREA SHOULD HAVE ADEQUATE WATER THIS SUMMER. FROM 95 PERCENT OF NORMAL ON THE ELK TO 113 PERCENT ON THE YAMPA. FORECASTS. BASED ON NORMAL PRECIPITATION FOR THE REMAINDER OF THE YEAR, ARE ALL NORMAL IF THE NEXT FEW MONTHS PRODUCE AT LEAST NORMAL SNOW, WATER SUPPLIES SOIL MOISTURE STATIONS INDICATE NEAR SHOULD BE SUFFICIENT FOR MOST NEEDS. NORMAL MOISTURE IN THE HIGH MOUNTAINS EXCEPT ON THE YAMPA WATERSHED. VALLEY SOILS ARE IN GOOD CONDITION. MOISTURE IS ONLY 60 PERCENT OF NORMAL.

This report prepared by JACK N. WASHICHEK and OON W McANOREW SOIL CONSERVATION SERVICE, COLORAGO STATE UNIVERSITY FORT COLLINS, COLORADO

F. A. MARK---STATE CONSERVATIONIST R.L. PORTER---AREA CONSERVATIONIST S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE DENVER, COLOR ADO GLENWOOD SPRINGS, COLORAGO

STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr-Sept

STREAM and STATION	FORE CAST	THIS YEAR % AVE.	15 YR. AVE. 1948-62
Elk at Clark Laramie at Jelm Little Snake at Lilly North Platte at Northgate White at Meeker Yampa at Maybell Yampa at Steamboat Spgs.	240 120 350 319 332 050 320	109 123 100 114	260 332 923

SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES	AS PERC	
Elk	1 2 5 2 5	95	114
Laramie		99	95
North Platte		93	106
White		109	98
Yampa		113	106

WATER SUPPLY OUTLOOK expressed "Poor, Fair, Good"

MALEN SOLLEL GOLFOON EXPLESSED	гии, га	ווי, שטטע
	FLOW	PERIOD
STREAM	April May	June Thru Sept.
Canadian River Hunt Creek Illinois River Michigan River Oak Creek Trout Creek	Good Good Good Good Good	Good Good Good Good Good

AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of	THIS YEAR AS PERCEI	ARS MOISTURE	
	STATIONS	Last Year	Average	
Laramie North Platte Yampa	2 2 2 2	89 104 98	89 93 60	

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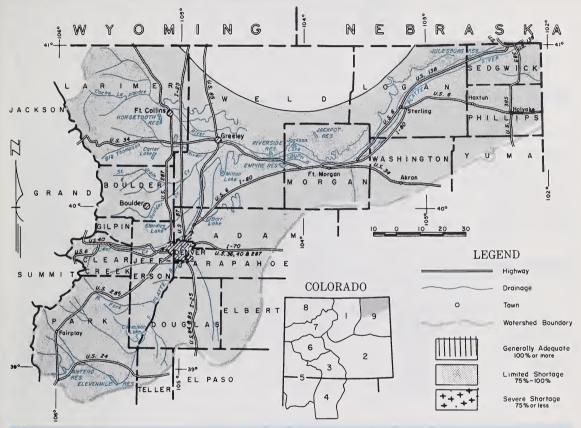
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

March 1, 1968

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SOME SHORTAGES OF WATER MAY EXIST, HOWEVER, IT SHOULD NOT BE SERIOUS. SNOWFALL IN THE HEADWATERS AREAS IS NEAR NORMAL. IF SNOWFALL REMAINS AVERAGE OR ABOVE, THE MAIN STEM OF THE SOUTH PLATTE AND IT'S TRIBUTARIES SHOULD HAVE NEAR AVERAGE RUNOFF. RESERVOIRS ON THE LOWER PLATTE HAVE GOOD CARRY-OVER STORAGE AND WILL BE AN EXCELLENT SUPPLEMENT TO STREAMFLOW. SOILS ARE REPORTED IN FAIR TO GOOD CONDITION IN THE IRRIGATED AREAS AND IN RELATIVELY GOOD CONDITION IN THE DRY LANDS. LATE SEASON STREAMFLOW WILL BE ONLY FAIR.

This report prepared by

JACK N. WASHICHEK and DON W. MCANOREW

SOIL CONSERVATION SERVICE: COLORADO STATE UNIVERSITY

FORT COLLINS, COLORADO

F. A. MARK.--STATE CONSERVATIONIST

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

DENVER, COLORADO STERLING, COLORADO

STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr-Sept

STREAM and STATION	FORE CAST	THIS YEAR %AVE.	15 YR. AVE. 1948-62	
Big Thompson at Drake (2) Boulder at Orodell Cache La Poudre at Canon Mouth (1) Clear Creek at Golden (3) Saint Vrain at Lyons	57 200 144	91 1 106 109 ⁻ 107 1	10 54 83 34 80	
(1) Observed flow minus trans-basin diversions. (2) Observed flow plus by-pass to power plants.				

SUMMARY OF SNOW MEASUREMENTS

RIVER	NUMBER of COURSES	THIS YEARS SNOW AS PERCENT OF		
L	AVERAGED	Last Year	Average	
Boulder Big Thompson Cache La Poudre Clear Creek Saint Vrain South Platte	2 4 7 4 2 3	176 110 118 109 150 106	126 91 111 99 109 97	

(3) Observed flow minus diversions through Jones Pass.

WATER SUPPLY OUTLOOK expressed "Poor, Fair, Good"

	FLOW	PERIOD
STREAM	April May	June Thru Sept.
South Platte from Fort Morgan to Sterling South Platte below	air air air	'Fair Fair Fair

AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of	THIS YEARS MOISTURE AS PERCENT OF		
	STATIONS	Last Year	Average	
South Platte Clear Creek Boulder Saint Vrain Big Thompson Cache La Poudre	2 2 1 2 3 2	115 106 140 140 138 89	93 91 144 124 102 89	

RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Carter Cheeseman Eleven Mile Empire Horsetooth	08.9 79.0 97.8 37.7 43.5	92.5 39.5 93.1 33.6 97.9	77.8 29.6 90.4 28.9 83.8	49.8 74.2 27.4

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Jackson Julesburg Prewitt Point of Rocks Riverside	35.4 28.2 32.8 70.0 57.5	33.2 20.5 23.0 64.0 55.2	20.5 8.3 54.1	30.6 20.6 18.0 51.8 44.0

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APPENDIX I

SNOW COURSE MEASUREMENTS as of March 1, 1968

		RRENT SE.	e-w-	PAS" -	TLOR:	1		-	RRENT NEID	MOTAM	Y	LLORC
Short -gr	- ATE ps - Ruey	SEF NOHE:	MATER CONTENT NUMBER	LATER (A+G 48-62		SNOA COURSÉ	DATE OF SURVEY	DEPTH (INCHES)	WATER CONTENT (INCHES)	HATER C	AVG 48-6.
NORTH PLATTE BASIN Laramie River Deadman (A) McIntyre	2/29 NS	38 48	12.2		12.9		Cucharas River Blue Lakes Cucharas Pass LaVeta Pass (B) Purgatoire River	2/27 2/28 2/28	28 35 37	6.8 8.2 8.9	3.9 4.7	8.5
Roach (A) North Platte River Cameron Pass Columbine Lodge	2/29	77	25.3	21.6	19.2		Burbon RIO GRANDE BASIN-Colo	NS			5.8	6.7
Northgate * Park View Willow Cr. Pass(B)	2/27 2/28	27 34 43	5.9 6.2 10.3	8.0 9.4			Alamosa River Silver Lakes Summitville (A) Conejos River	2/26 2/28	27 46	7.0 13.8	5.3 11.8	6.6 15.5
SOUTH PLATTE BASIN Boulder Creek Boulder Falls * University Camp	2/28 2/28	52 62	16.8 18.0	8.3 11.4	9.9 17.6		Cumbers (A) Platoro (A) * River Springs Culebra River	2/28 2/28 2/26	46 48 17	13.8 14.4 4.3		17.0 13.5 7.1
Big Thompson River Deer Ridge * Hidden Valley Lake Irene (B) Long's Peak * Two Mile *	2/28 2/28 2/25 2/24 2/28	20 37 75 34 48	3.6 7.4 19.0 9.5	8.5	4.7 9.4 20.0 9.8 12.6		Brown Cabin Cottonwood (B) Culebra (A) LaVeta Pass (B) Trinchera (B)	2/28 2/28 2/28 2/28 2/27	29 26 30 37 30	5.5 5.4 7.8 8.9 7.8	4.4 7.5 4.7 5.1	8.5
Cache La Poudre Bennett Creek Big South Cameron Pass Chambers Lake Deadman Hill (A) Hour Glass Lake Joe Wright Lost Lake * Pine Creek Red Feather *	2/28 2/25 2/27 2/25 2/29 2/28 2/27 2/25 2/29 2/29	30 13 77 35 38 26 69 40 13 28	6.6 3.1 25.3 9.8 12.2 5.4 19.3 11.2 3.0 5.6	2.4 21.6 7.0	 2.5		Rio Grande Cochetopa Pass * Grayback Hiway * Lake Humphrey (A)* Love Lake Pass Creek * Pool Table (A)* Porcupine* Santa Maria Upper Rio Grande Wolf Cr. Pass Wolf Cr. Sum.(B)	2/28 NS 2/28 2/28 2/28 2/28 2/26 2/27 2/28 2/28 2/28 2/28	23 59 32 32 44 26 36 23 35 66 70	5.4 	2.0 20.1 3.4 4.2 9.2 3.6 7.3 4.5 5.1 25.1 23.7	21.6 6.6 10.2 5.5 9.6 5.0 7.9 25.6
Clear Creek Baltimore Berthoud Falls * Empire * Grizzly Peak (B) Loveland Lift	2/29 2/29 2/29 2/28 2/29	34 51 30 63 77	8.0 12.1 6.9 15.5 20.1	4.8 9.5 6.8 14.3 9.8	6.5 15.0 		RIO GRANDE BASIN-N.M. <u>Pecos River</u> Panchuela <u>Rio Chama</u>	1	19	5.1	0.4	2.9
Loveland Pass Saint Vrain River Copeland Lake * Ward *	2/29 2/28 2/28 NS	21 26	12.5 4.8 6.0	3.7 3.5 9.0	4.5 5.4 11.9		Bateman* Capulin Peak Chama Divide Chamita Rio Grande	2/29 2/27 2/27	23 14 27	5.3 3.9 7.0	2.2 0.5 4.5	4.2
Wild Basin South Platte River Como Geneva Park * Horseshoe Mt. Hoosier Pass Jefferson Creek * Mosquito Trout Creek Pass	2/27 2/28 2/26 2/28	31 21 33 46 33 40 16	6.6 3.1 6.1 10.6 8.5 7.6 3.8	6.0 3.8 8.2 9.7 7.3 8.5	3.7 11.1 8.0		Aspen Grove Big Tesuque Bluebird Mesa Cordova (A) Elk Cabin Fenton Hill * Mora View Pajarito Peak Payrole (A)	2/28 2/27 3/1 2/28 2/28 2/29 2/23 3/1 2/28	24 16 24 39 19 22 12 7 37	4.9 4.8 4.9 10.9 4.0 5.7 3.0 1.1 10.0	1.5 1.5 6.2 0.2 1.1 0.0 0.0 3.6	10.0 3.2 4.1 0.0 0.0
ARKANSAS BASIN <u>Arkansas River</u> Bigelow Divide Cooper Hill (B) East Fork *	2/28 2/27 2/28	45 50 37	8.7 9.6 8.6	3.0 9.9 8.5			Quemazon`* Rio En Medio * Sandavol Taos Canyon Tres Ritos	2/27 2/27 2/27 2/27 2/23	28 25 21 17 20	8.0 6.4 6.4 4.6 5.0	4.1 4.5 0.9 2.0 1.8	4.8
Four Mile Park Fremont Pass	2/28 2/28	31 56	6.4 13.1	6.5 13.9	4.5 13.8		<u>Rio Hondo</u> Twinning	2/27	28	8.7	5.7	
Garfield Monarch Pass Tennessee Pass Twin Lakes Tunnel Westcliffe *	2/29 2/29 2/28 2/28 2/28	40 45 44 37 41	10.8 13.1 9.2 8.5 10.4	10.8 11.7 9.3 10.0 6.0	15.6 8.7 9.7		<u>Red River</u> Hematite Park Red River	2/26 2/26	18 24	5.0 6.4	1.4	

APPENDIX I

SNOW COURSE MEASUREMENTS as of March 1, 1968

	DATE		WE TAME	MATER C	
2x → 1 → 4	SURVEY	SNUA SERTH INCHESI	MATER CONTENT INCHES	_AST YEAR	A / G 48-62
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade Lemon	2/28 2/27	43 36	14.9 11.6	10.6	11.9
Mineral Creek*	2/28	61	17.5	12.3	13.2
Molas Lake*	2/28	46	14.7	12.6	12.7
Red Mountain*	2/28	100	30.2	21.0	26.0
Purgatoire Silverton Sub-Sta.	2/27	61 42	20.0	15.7 7.9	5.6
Spud Mountain*	2/28	71	23.2	19.0	
Dolores River Lizzard Head	2/28	57	17.2	14.6	13.2
Lone Cone	2/28	50	14.8	12.8	
Rico	2/28	34	10.4	4.9	8.0
Telluride	2/27	33 56	8.7 14.8	5.1 12.1	6.7
Trout Lake* San Juan River	2/27	50	14.0	12.1	11.3
Chama Divide (B)	2/27	14 27	3.9 7.0	0.5 4.5	4.2 9.0
Chamita (B) Upper San Juan	2/27 2/28	75	26.2	26.0	
Wolf Cr. Pass (B)	2/28	66	22.6	25.1	25.6
Wolf Cr. Summit GUNNISON RIVER	2/28	70	22.8	23.7	23.2
GUNNISON RIVER Gunnison River					
Alexander Lake (A)		65	16.9	19.2	17.8
Black Mesa Blue Mesa*	NS 2/28	37	9.6	5.8	6.
Butte	2/28	49	13.2	13.9	
Cochetopa Pass*(B)		23	5.4	2.0	4.9
Crested Butte	2/27	44 57	11.6 15.5	11.7	12.
Keystone Lake City	2/27	32	7.6	4.6	8.0
Long Draw	NS				
Mesa Lakes (B) McClure Pass* (A)	2/27	51 58	12.5 16.8	15.3 19.7	14.3
Park Cone	2/25	32	7.3	11.1	9.7
Park Reservoir (A)		72 44	20.2	22.3	21.
Porphyry Creek Tomichi	2/29	37	10.4	9.6	
Surface Creek	2/25	65	16.9	19.2	17.8
Alexander Lake (A) Mesa Lakes (B)	2/27	51	12.5	15.3	14.3
Park Reservoir (A)		72	20.2	22.3	21.
<u>Uncompahgre River</u> Ironton Park	2/28	55	14.7	10.8	10.
Red Mountain Pass*	2/28	100	30.2	21.0	26.0
Telluride (B)	2/27	33	8.7	5.1	6.
COLORADO BASIN					
Blue River Blue River*	2/28	37	7.5	7.4	7.
Fremont Pass	2/28	56 29	13.1	13.9	13.
Frisco* Grizzly Peak	2/28	63	7.5 15.5	6.8	7.5
Hoosier Pass (B)	2/28	46	10.6	14.3 9.7	11.
Shrine Pass	2/28	63	14.7	15.1	14.
Snake River* Summit Ranch*	2/28 NS	26	7.2	7.5 6.8	7.5
Samme name					

	2.05	RENT INFOR	RMATION	PAST RECORD
SADA COURSÉ	DATE OF SURVEY	SNOW DEPTH - NCHES!	MATER CONTENT (INCHES)	LAST A.G
Colorado River				YFAR 49:62
Arrow Berthoud Pass Berthoud Summit* Cooper Hill Fiddler Gulch Glen Mar Ranch Gore Pass* Grand Lake* Lake Irene Lapland Lulu Lynx Pass McKinzie Pass Middle Fork Milner North Inlet Pando* Phantom Valley Ranch Creek* Tennessee Pass Vail Pass* Vasquez	2/28 2/28 2/27 2/27 EST 2/26 2/25 2/26 2/25 2/26 2/28 2/25 2/26 2/28 2/25 2/28 2/25 2/28 2/25 2/28 2/25 2/26	45 58 68 50 64 35 75 38 62 25 41 35 48 38 60 42	11.6 14.3 16.9 9.6 16.3 6.4 8.7 7.9 19.0 8.6 16.1 5.7 9.3 12.0 9.7 7.7 7.7 7.7 10.4 8.5	10.9 9.5 12.7 12.2 16.0 16.5 9.1 15.0 14.9 9.3 10.0 14.9 14.2 11.2 11.8 6.1 8.6 8.0 11.9 9.2 7.3 7.3 7.3 7.3 9.3 8.7 12.9 16.0 9.7 10.4
Roaring Fork River Aspen Chapman Independence Pass Ivanhoe Kiln Last Chance Lift* McClure Pass* (A) Nast North Lost Tr. (A)	2/26 3/1 2/28 3/2 3/2 2/28 2/26 2/25 3/1 2/25	47 47 54 59 42 37 45 58 27 59	12.3 11.5 13.9 15.2 10.7 8.3 12.4 16.8 6.1 14.8	17.5 12.0 15.1 14.9 15.1 15.6 10.7 18.0 13.9 19.7 15.5 7.6 6.3 19.0 13.7
Williams Fork River Glen Mar Ranch Jones Pass* Middle Fork	2/28 2/27 2/28	35 58 41	6.4 13.3 9.2	7.5 7.0 13.1 10.9 8.6 8.0
Willow Creek Granby* Willow Cr. Pass	2/25 2/28	26 43	5.2 10.3	7.8 6.2 12.6 11.0
Plateau Creek Mesa Lakes Park Reservoir (A) Trickle Divide (A)	2/27 2/25 2/25	51 72 77	12.5 20.2 21.6	15.3 14.3 22.3 21.1 23.9 22.5
YAMPA BASIN				
Elk River Clark Elk River Hahn's Peak	NS 2/28 2/28	 65 53	18.2 13.8	14.7 19.2 15.9
White River Burro Mountain (A) Rio Blanco	2/25 2/27	58 56	15.1 13.7	14.6 15.7 11.8 13.6
Yampa River Bear River Columbine Lodge(B) Dry Lake Lynx Pass (B) Räbbit Ears Yampa View*	NS 2/29 2/27 2/25 2/29 2/29	65 65 50 81 53	20.6 19.6 12.4 25.5 15.6	21.9 20.5 17.3 18.5 11.2 10.8 20.1 24.9 12.2 13.8

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of March 1, 1968

STATION	DATE OF SURVEY	(INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River Muddy Pass Willow Pass	11/22/67 11/3/67	11.1 9.5	6.2 6.2	6.3 5.6	6.
SOUTH PLATTE BASIN					
Boulder Creek Alpine Camp	12/11/67	6.9	5.2	3.7	3.
Big Thompson River Beaver Dam Guard Station Two Mile	1/21/68 10/10/67 1/21/68	7.1 6.9 9.1	4.6 3.5 5.0	2.9 2.5 4.1	3. 3. 5.
Clear Creek Clear Creek Hoop Creek	11/29/67 11/17/67	9.5 4.9	7.7 3.0	7.1 3.0	9.
Cache La Poudre River Feather Laramie Road	10/27/67 10/17/67	10.1 12.4	4.5 6.6	3.9 8.6	4 7
South Platte River Hoosier Pass Kenosha Pass	11/10/67 11/10/67	7.8 4.4	4.8 2.3	4.1 2.1	5 2
RKANSAS BASIN <u>Arkansas River</u> Garfield Leadville Twin Lakes Tunnel	11/15/67 11/15/67 11/15/67	6.7 7.8 4.5	6.0 5.7 2.8	4.4 3.7 2.6	3 4 2
RIO GRANDE BASIN, Colorado					
Conejos River Mogote	10/16/67	10.7	6.3	5.9	5
<u>Rio Grande</u> Alberta Park Bristol View LaVeta Pass	10/13/67 10/17/67 10/17/67	8.2 6.1 11.9	6.2 2.4 10.0	3.9 7.5	5 4 6
RIO GRANDE BASIN, New Mexico					
Rio Chama Bateman Chamita	2/26/68 NS	6.7 8.0	4.4	4.6 5.2	2
Rio Grande Aqua Piedra Big Tesuque Fenton Hill Rio En Medio Taos Canyon	2/27/68 NS NS NS 2/27/68	7.2 3.7 6.5 3.5 3.3	3.0	4.8 NS NS 1.1 2.0	3 1 4 1 2
Red River				1.5	2
Red Summit	2/27/68	4.8	1.5	1.5	2
Animas River Cascade Mineral Creek Molas Lake	11/14/67 11/14/67 11/14/67	9.1 5.7 9.4	5.9 3.8 6.2	4.6 3.0 5.0	6 3 4
Dolores River Dolores Lizzard Head Rico	11/13/67 11/13/67 11/13/67	19.6 11.8 13.8	12.7 7.6 11.1	12.5 8.1 9.9	5 8 9
GUNNISON BASIN					
Gunnison River King	11/15/67	3.3	2.7	1.6	1

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
_ORADO BASIN (MAINSTEM)					
Blue River Blue River	11/10/67	4.2	2.3	2.0	2.
Colorado River		3.9	2.9	3.0	2.
Berthoud Pass Gore	11/17/67 11/6/67 11/14/67	4.9 12.5	2.3	2.3 7.9	2.
Grand Mesa Ranch Creek	11/15/67 11/29/67	8.7 12.3	5.1	5.0	6
Vail Vasquez Siphon	Estimated	11.0	6.6	6.8	7.
Roaring Fork River Placita	11/25/67	9.3	5.3	4.6	5.
MPA BASIN					
<u>Yampa River</u> Hahn's Peak	11/22/67	19.0	5.9	6.1	13
	:				
			3		
			1		

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer New Mexico State Engineer Nebraska State Engineer Colorado Experiment Station Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

Forest Service Soil Conservation Service

Department of Interior

Bureau of Reclamation Geological Survey National Park Service Indian Service

Department of Commerce

Weather Bureau

War Department

Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company Public Service Company of New Mexico

MUNICIPALITIES

City of Denver City of Greeley
City of Boulder City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company San Luis Valley Irrigation District Santa Maria Reservoir Company Costilla Land Company Uncompangre Valley Water Users' Association Twin Lakes Reservoir and Canal Company Trinchera Irrigation Co.

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

SNOW SURVEY UNIT
AG. ENGINEERING SHOP
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

OFFICIAL BUSINESS

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"The Conservation of Water begins with the Snow Survey"